

## Abstract of Disclosure

[0196]           A data networking system designed to provide efficient yet reliable transportation of data across a time division multiplexed network. This invention allows for redundantly sending and resending of segments in a dynamic manner. In addition, segments are fragmented, resized and sent with low overhead due to dynamic header sizes, segment sizes, forward error correction, and cyclic redundancy checks. The result is a very adaptive network that meets the demanding requirements of networks such as power line and wireless while still being able to transport data for voice, audio, video, computer, control, and the like.